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Book warns of a new arms race in deadly chemical and biological weapons

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Washington

Rapid technological developments have spurred a chemical and biological arms race that could pose a greater threat than nuclear weapons, say the authors of a new book on chemical and biological (C/B) warfare.

In "America the Vulnerable," Joseph Douglas and Neil Livingston say that by the end of the century at least 50 countries - including Libya, Syria, Iran, and North Korea - will have either C/B weapons of mass destruction or the capacity to produce them.

Moreover, C/B weapons - "the poor man's atomic bomb" - will be easily accessible to terrorist groups, the two scholars say.

"We are entering an era when even the smallest nation or terrorist group may be armed with chemical or biological (or biochem) weapons of mass destruction, in some cases giving them military parity with the major powers," according to the 160-page book.

"It's a threat that is not science fiction," says Dr. Livingston, a terrorism expert. "It's a threat that is here."

Chemical warfare is not new. Germany initiated the modern use of chemical agents in World War I. Chemical agents have been used by the Soviet Union in Afghanistan and, as recently as last month, by Iraq in the Iran-Iraq war. In addition, there have been allegations that Vietnam has used toxins in Laos and Cambodia.

But chemical substances "thousands of times more potent than the nerve agents of the 1960s" now can be manufactured easily and in relative safety, making them the ideal weapon for third-world nations too poor to compete in the nuclear arms race.

"For a third-world country, what

we're dealing with here is simply [equivalent to] the capacity to develop insecticides," Livingston says. "Chemical agents and nerve agents are nothing more than insecticides for human beings."

Terrorist organizations can even bypass the manufacturing process by purchasing toxic chemicals on the open market, the authors report.

More frightening, the authors say, are weapons that could result from the revolution in biotechnology and genetic engineering that began in the early 1970s.

Harnessed for destructive purposes, say the authors, advances made possible by biotechnology over traditional chemical and biological weapons could parallel or exceed the advances that nuclear weapons have brought over conventional explosives. Among them: biological agents capable of producing plagues or devastating livestock herds and agricultural production.

"Attention so far has been focused on the benefits [of the biotechnology revolution]," Dr. Douglas says. "People have not looked at what the same advances mean when applied, in effect, to evil - and technology knows no difference."

Worse may be the more subtle damage that could be inflicted by nonlethal C/B weapons, "psychochemical" agents capable of producing behavioral changes and disrupting the ability to think logically.

"Such drugs ... could be surreptitiously administered to an unsuspecting population, with grave societal and national-security consequences," the report says.

But the most obvious threat posed by C/B weapons is their use on the battlefield. Since the 1970s, the report says, Soviet scientists have been busy

seeking ways to apply genetic engineering to biological warfare, in violation of a 1972 international convention banning biological warfare.

Thus, while the United States debates plans for defense against nuclear attack, the US has become "almost defenseless" against the threats of chemical, biological, and toxin weapons posed by the Soviets and by third-world countries and terrorist groups that are expanding their capabilities, the book says.

In 1969 President Nixon stopped the production of chemical and biological weapons and destroyed existing stockpiles of biological weapons, arguing that such weapons were redundant in an age of nuclear deterrence.

Concerned that relying on aging stockpiles of chemical weapons is tantamount to unilateral disarmament, the Reagan administration has sought to recreate a modest retaliatory capability. Unless Congress objects, the US will begin production of binary chemical weapons next fall.

But Douglas and Livingston say it would be a mistake for the US to respond to the threat by expanding its own C/B production as a deterrent or for retaliation.

Instead, they say the US needs to develop a better capacity to respond to emergencies when they arise. That means expanded intelligence to detect possible threats.

It also means keeping abreast of the advancing technology, creating a presidential advisory council to review scientific developments.

The report also recommends a C/B crisis-response team, experts organized and prepared to respond when C/B incidents arise, and a covert strike force to preempt incidents when intelligence is obtained beforehand.

In 1984 the US proposed a new treaty to bar the production, storage, and use of chemical weapons.